AMENDMENTS TO THE SPECIFICATION

Please delete the paragraph bridging pages 2 and 3 and replace it with the following new paragraph:

The photostimulable phosphor (storage phosphor) is a substance which accumulates a part of radiation energy when irradiated with a radiation; and after that, emits ~~stimulated fluorescence~~ photostimulable luminescent light corresponding to the accumulated energy when irradiated with an excitation light such as visible light. The presence of that has been long known. The radiation imaging method using the photostimulable phosphor will be described below. First, using an imaging apparatus, a radiation image of an object such as human body is taken on a sheet, to which photostimulable phosphor is applied, and recorded thereon. Then, using an image reading apparatus, the photostimulable phosphor sheet is scanned with excitation light such as a laser beam, and thereby photostimulable luminescent lighe~~stimulated fluorescent light~~ is read out photoelectrically by a photo-multiplier of the image reading apparatus. Based on the analog image signals obtained as described above, digital image data is obtained. Further, after being appropriately processed by using a medical image processing apparatus, the image data is outputted to a display such as a CRT, or printed out on a film with a laser printer or the like. Consequently, a radiation image, in which the energy level of the radiation transmitted through the object is visualized by means of gray levels or gradation, is obtained.

Please delete the first full paragraph on page 4 and replace it with the following new paragraph:

In the above-mentioned radiation image reading apparatus disclosed in JP-2000-275758A, test image signals are previously prepared, and based on the test image signals, image data is generated. However, in this radiation image reading apparatus, no test can be carried out in the processes from the generation of the photostimulable luminescent light~~stimulated~~

~~fluorescent light~~ to the generation of the image data based on the image signal which is represented by means of photostimulable luminescent light~~stimulated fluorescent light~~.

Please delete the paragraph bridging pages 22 and 23 and replace it with the following new paragraph:

The medical image reading apparatus 200 photoelectrically reads radiation image information recorded on the recording sheet 10, and converts the energy level of the radiation irradiated on the recording sheet 10 into data, thereby generates image data. The reading of the radiation image information is carried out as described below. That is, the surface of the recording sheet 10 is scanned by means of light beam, which has been emitted from a laser light source 201 and passed through an optical scanning section 202. As a consequence, from the region of the recording sheet 10 irradiated with the light beam, photostimulable luminescent light~~stimulated fluorescent light~~ of an amount corresponding to the accumulated radiation energy is generated. The photostimulable luminescent light~~stimulated fluorescent light~~ is guided by an optical guide and photoelectrically detected by a photo-multiplier 203 and outputted as an analog signal representing the radiation image information. Further, this analog signal is amplified by an amplifier 204, and digitized by an A/D converter 205. The image data, which has been generated as describe above, is outputted to the medical image processing apparatus 300 along with information incidental to the image through the network N1.

Please delete the first full paragraph on page 23 and replace it with the following new paragraph:

Alternately, as the method in the medical image reading apparatus, another method as described below may be adopted. That is, as the light source for energizing the photostimulable luminescent light~~stimulated fluorescent light~~, a line light source in which LEDs or the like are

disposed in the primary scanning direction is used, and as the detector for detecting the photostimulable luminescent light~~stimulated fluorescent light~~, a scanning head having a line sensor of CCDs or the like disposed in the primary scanning direction is used. While relatively moving the scanning head and the photostimulable phosphor sheet 10 in the secondary scanning direction perpendicular to the primary scanning direction, the excitation light emitted from the line light source is allowed to be made incident on the photostimulable phosphor sheet 10, and the photostimulable luminescent light~~stimulated fluorescent light~~ generated from the photostimulable phosphor sheet 10 is read by the line sensor.

Please delete the paragraph bridging pages 53 and 54 and replace it with the following new paragraph:

The edge detecting patterns 45 are patterns used as the reference for geometrical measurement, and include ~~sharp~~-sharp-angled edge portions 45a and 45b respectively for measuring MTF (modulation transfer function) in the X-direction and Y-direction. Each of the sharp-sharp-angled edge portions 45a and 45b is formed of a tungsten plate, and at the outside thereof, a lead plate 50 is disposed. By virtue of this arrangement, in the peripheral region of the sharp-angled edge portions 45a and 45b, since a large part of the irradiated radiation is shield, any influence from the surrounding can be prevented, and therefore, the sharpness can be evaluated further precisely. Here, the above-mentioned MTF is obtained by differentiating the radiation image of the edge detecting pattern 45a or 45b to obtain a line spread function, and then subjecting it to a Fourier transformation.

Please delete the third full paragraph on page 67 and replace it with the following new paragraph:

Then, at step S51, the CPU_460 reads out the correcting program from the image correcting program-recording section 472 to carry out the correcting program. That is to say, the image correcting section 464 carries out the image processing to make the phantom image to perform parallel shift and rotational shift in the direction opposite to the amount of position difference, based on the amount of difference of the phantom image (refer to Figs. 11A and 11B) in the parallel direction and rotational direction which has been obtained at step S5 in Fig. 5. Thereby, the amount of position difference of the phantom image including the pattern image is corrected.

Please delete the paragraph bridging pages 68 and 69 and replace it with the following new paragraph:

As described above, the inspection method of the radiation imaging system, the medical image processing apparatus using the same and the QC phantom used for the inspection of the radiation imaging system according to first to fourth embodiments of the present invention have been described. However, the present invention is not limited to the above-described embodiments. Within a range where the spirit of the present invention set forth in the claims of the present invention is not exceeded, various modifications are possible in designing thereof. For example, as for the recording medium for recording the transmitted radiation of the QC phantom, in addition to the photostimulable phosphor sheet 10, a flat panel device which converts the transmitted radiation level into ~~electrical~~ an electrical signal may be used.